

DaimlerChrysler AG

Abstract

The invention relates to an internal high pressure forming installation (1) with a forming tool (2) which contains an upper die (3) and a lower die (4) which, with their cavity (5), form a forming chamber (6) for a peripherally closed hollow profile (7) to be inserted therein. The installation (1) has at least one axial punch (8) by means of which the hollow profile (7) can be sealed at one end (9) and which has an axial through channel (10) via which an internal high pressure can be produced by a pressurized fluid in the hollow profile (7) in order to expand it. Furthermore, the installation (1) comprises a rapid filling device (11) which has a filling attachment (12) with a filling bore (13), (29), the diameter of which is larger than that of the through channel (10) of the axial punch (8) and via which the hollow profile (7) can be filled with pressurized fluid in a position of the axial punch (8) in which it is drawn back from the respective hollow profile end (9), the filling attachment (12) having a through bore (14) through which the axial punch (8) protrudes during the forming process the hollow profile (7). In order for the production of hollow profiles (7) formed by internal high pressure to be suitable for mass production in a simple manner, the production making use of a rapid filling device (11), which is integrated in the installation (1), for filling the hollow profile (7), it is proposed according to the invention that the filling attachment is connected to a transporting device which brings the filling attachment (12) into a contact position on the forming tool (2) in order to fill it and, after the filling, guides it into a position remote from the forming tool.

(According to Fig. 1)